# ABSTRACT

**Objective:**

To investigate the effect of zinc supplementation as an adjunct in children with enteric fever.

**Design:**

Double blind, randomised, placebo controlled trial.

**Setting:**

Teaching hospital, Chennai, India.

**Participants:**

Fifty eight children aged 1 to 12 years with fever and Widal or blood culture positive for *Salmonella typhi/ paratyphi*.

**Intervention:**

Children with enteric fever were randomised to receive 40 mg elemental zinc per day (n=29) or placebo (n=29) for one week. All children received intravenous Ceftriaxone (75 mg/kg every 12 hours) until 5 days after defervescence.

**Main outcome measures:**

Time taken for defervescence of fever and resolution of toxemia.

**Results:**

All 58 children in the zinc and placebo group completed the study.

In the intention to treat analysis, the proportions of children with fever defervescence by day 3 (22 (75.9%) v 15 (51.7%), P=0.043) and by day 4 (26 (89.7%) v 17 (58.6%), P=0.043) were significantly more in the zinc supplemented group than in the control group.

Resolution of toxemia was noted for more cases by day 2 in the zinc group than in the control group (15 (75%) v 10 (43%), P=0.054). The proportions of children who got discharged by day 8 (22 (75.9%) v 15 (51.7%), P=0.054) and by day 9 (26 (89.7%) v 17 (58.6%), P=0.054) were higher in the zinc supplemented children.

**Conclusion:**

Zinc, when used as an adjunct along with standard antibiotic therapy in children with enteric fever, may cause an earlier resolution of toxemia, and also an earlier defervescence of fever. This is a cost effective and safe intervention.